

**(use as many sheets as necessary)**

Sheet	1	of	2
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Application Number	Not Yet Assigned
Filing Date	Even Date Herewith
First Named Inventor	Stuart PITSON et al
Group Art Unit	1652
Examiner Name	Monshipoo
Attorney Docket Number	PITSON=1A

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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Sheet 2

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**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
—	AF	PINKOVSKA-GALCHEVA et al. "THE FORMATION OF CERAMIDE-1-PHOSPHATE DURING NEUTROPHIL PHAGOCYTOSIS AND ITS ROLE IN LIPOSOME FUSION", The Journal of Biological Chemistry, Vol. 273, No. 50 pgs. 33203-33209	
—	AG	KOHAMA et al. "MOLECULAR CLONING AND FUNCTIONAL CHARACTERIZATION OF MURINE SPHINGOSINE KINASE", The Journal of Biological Chemistry, Vol. 273, No. 37 pgs. 23722-23728 <i>Duplicate</i>	
—	AH	KOLESNICK et al. "CHARACTERIZATION OF A CERAMIDE KINASE ACTIVITY FROM HUMAN LEUKEMIA (HL-60) CELLS", The Journal of Biological Chemistry, Vol. 273, No. 31 pgs. 18803-18808	
—	AI	NAVA et al. "Functional Characterization of Human Sphingosine Kinase-1" FEBS LETTERS, vol. 473, no. 1, May 4, 2000, pp. 81-84.	
—	AJ	Sue Y et al. "SPHINGOSINE 1-PHOSPHATE, A NOVEL SIGNALING MOLECULE, STIMULATES DNA BINDING ACTIVITY OF AP-1 IN QUIESCENT SWISS 3T3 FIBROBLASTS", The Journal of Biological Chemistry, Vol. 269, No. 23 pgs. 16512-16517	
—	AK	Geneseq Database, Accession No. AAV84490, 3-1899.	
—	AL	SPTREMBL Database, Accession No. 088886, 11-1998, cited as Kohama et al J.B.C. 273, 23722-23728, 1998 in the IDS	

Examiner Signature	<i>R. Monshy</i>	Date Considered	6/23/05
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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1

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Application Number	10/642,289
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First Named Inventor	Stuart PITSON et al
Group Art Unit	1652
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Attorney Docket Number	PITSON=1A

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re.re.	AM	ALTSCHUL, S., et al; "Basic Local Alignment Search Tool"; <i>J. MOL. BIOL.</i> (1990); Vol. 215; pages 403-410.	
re.re.	AN	Alessenko; A. V., "REVIEW: Functions of Sphingosine in Cell Proliferation and Death"; <i>BIOCHEMISTRY</i> (1998); Vol. 63; pages 62-68; [online] [retrieved on August 28, 2003]. Retrieved from Internet: <URL: <a href="http://www.protein.bio.msu.su/biokhimiya/contents/v63/full/63010075.htm">http://www.protein.bio.msu.su/biokhimiya/contents/v63/full/63010075.htm</a> >	
re.re.	AO	BONNER; T., "Reduction in the Rate of DNA Reassociation by Sequence Divergence"; <i>MOL. BIOL.</i> (1973); Vol. 81; pages 123-135.	
re.re.	AP	BRADFORD; M., "A Rapid and Sensitive Method for the Quantitation of Microgram Quantities of Protein Utilizing the Principle of Protein-Dye Binding"; <i>ANALYTICAL BIOCHEMISTRY</i> (1976); Vol. 72; pages 248-254.	
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re.re.	AR	BUEHRER, Benjamin and Robert Bell; "Sphingosine Kinase: Properties and Cellular Functions"; <i>ADVANCES IN LIPID RESEARCH</i> (1993); Vol. 26; pages 59-67;	
re.re.	AS	BUEHRER, B., et al; "Protein Kinase C-dependent Regulation Of Human Erythroleukemia (HEL) Cell Sphingosine Kinase Activity"; <i>BIOCHIMICA ET BIOPHYSICA ACTA</i> (1996); Vol. 1303; pages 233-242.	
re.re.	AT	CUVILLIER et al; "Suppression of Ceramide-Mediated Programmed Cell Death by Sphingosine-1-phosphate"; <i>NATURE</i> (1996); Vol. 381; pages 800-803.	
re.re.	AU	DOUILLARD et al; "Basic Facts About LYMPHOCYTE HYBRIDOMAS"; <i>BASIC FACTS ABOUT HYBRIDOMAS IN COMPENDIUM OF IMMUNOLOGY</i> (1981); Vol. II; pages 119-219; ed. Schwartz.	
re.re.	AV	DUGGLEBY, R.G., "A Nonlinear Regression Program for Small Computers"; <i>ANALYTICAL BIOCHEMISTRY</i> (1981); Vol. 110; pages 9-18;	
re.re.	AW	GRAHAM, F. L. and A. Van Der Eb; "Transformation of Rat Cells by DNA of Human Adenovirus 5"; <i>VIROLOGY</i> (1973); Vol. 54; pages 536-539;	
—	AX	HANKS, S.K., et al; "Conserved Features of the Catalytic Domains"; <i>SCIENCE</i> (1988); Vol. 241; pages 42-62.	

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Group Art Unit	1652
Examiner Name	Monshi-pou
Attorney Docket Number	PITSON=1A

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
re.re.	AY	IGARASHI; Yasuyuki, "Functional Roles of Sphingosine 1-Phosphate, and Methylsphingosines: In Regard to Membrane Sphingolipid Signaling Pathways"; J. BIOCHEM. (1997); Vol. 122; pages 1080-1087.	
re.re.	AZ	KOHAMA et al; "Molecular Cloning and Functional Characterization of Murine Sphingosine Kinase"; JOURNAL OF BIOLOGICAL CHEMISTRY (1998); Vol. 273; No. 37, pages 23722-23728.	
1	BA	KOHLER et al; "Continuous Cultures Of Fused Cells Secreting Antibody Of Predefined Specificity"; NATURE (1975); Vol. 256; pages 495-499.	
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re.re.	BD	MASAI et al; "Drosophila retinal degeneration A gene encodes an eye-specific diacylglycerol kinase with cysteine-rich zinc-finger motifs and ankyrin repeats"; PROC. NATL. ACAD. SCI. USA (1993); Vol. 90; pages 11157-11161.	
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re.re.	BF	MEYER ZU HERINGDORF et al; "Molecular Diversity of Sphingolipid Signalling"; -FEBS LETTERS (1997); Vol. 410; pages 34-38.	
re.re.	BG	NAGIEC et al; "The LCB4 (YOR171c) and LCB5 (YLR260w) Genes of Saccharomyces Encode Sphingoid Long Chain Base Kinases"; JOURNAL OF BIOLOGICAL CHEMISTRY, (1998); Vol. 273; No. 31, pages 19437-19442.	
re.re.	BH	OLIVERA et al; "Sphingosine-1-phosphate as second Messenger in Cell Proliferation Induced by PDGF and FGS Mitogens"; NATURE (7 October 1993); Vol. 365; pages 557-560.	
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re.re.	BJ	PONTING et al; "SMART: Identification And Annotation Of Domains From Signalling And Extracellular Protein Sequences."; NUCLEIC ACIDS RESEARCH (1999); Vol. 27; No. 1, pages 229-232.	

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Filing Date	August 18, 2003
First Named Inventor	Stuart PITSON et al
Group Art Unit	1652
Examiner Name	Monshigui
Attorney Docket Number	PITSON=1

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re.re.	BK	R. REN et al; "Identification of a Ten-Amino Acid Proline-Rich SH3 Binding site"; <i>SCIENCE</i> (February 19, 1993); Vol. 259; pages 1157-1161.	
re.re.	BL	RHOADS et al; "Sequence Motifs For Calmodulin Recognition"; <i>FASEB JOURNAL</i> (1997); Vol. 11; pp. 331-340.	
re.re.	BM	SAKANE et al; "The C-terminal Part Of Diacylglycerol Kinase $\alpha$ Lacking Zinc Fingers Serves As A Catalytic Domain"; <i>BIOCHEM. J.</i> (1996); Vol. 318; pages 583-590.	
re.re.	BN	SARASTE et al; "The P-loop-a Common Motif in ATP- and GTP- Binding Proteins" <i>TRENDS BIOCHEM. SCI.</i> (November 1990); Vol. 15; pages 430-434.	
re.re.	BO	SCHAAP et al; "Consensus Sequences for ATP-binding Sites In Protein Kinases Do Not Apply To Diacylglycerol Kinases"; <i>BIOCHEMICAL JOURNAL</i> (1994); Vol. 304; pages 661-662.	
re.re.	BP	J. SCHULTZ et al; "SMART, A Simple Modular Architecture Research Tool: Identification Of Signaling Domains"; <i>Proc. Natl. Acad. Sci., USA</i> , (1998); Vol. 95; pages 5857-5864.	
re.re.	BQ	SMITH et al; "Measurement of Protein Using Bicinchoninic Acid"; <i>ANALYTICAL BIOCHEMISTRY</i> (1985); Vol. 150; pp. 76-85.	
re.re.	BR	SPIEGEL et al; "REVIEW: Roles of Sphingosine-1-phosphate in Cell Growth, Differentiation and Death"; <i>Biochemistry (Mosc)</i> (1998); Vol. 63; pages 69-73; [online] [retrieved on August 28, 2003]. Retrieved from Internet: <URL: <a href="http://www.protein.bio.msu.su/biochimiyu/contents/v63/full/63010083.htm">http://www.protein.bio.msu.su/biochimiyu/contents/v63/full/63010083.htm</a> >	
re.re.	BS	WALKER et al; "Distantly Related Sequences in the $\alpha$ - and $\beta$ -subunits of ATP Synthase, Myosin, Kinases And Other ATP-Requiring Enzymes And A Common Nucleotide Binding Fold"; <i>EMBO J.</i> , (1982); Vol. 8; pages 945-951; IRL Press Limited, Oxford, England.	
re.re.	BT	WALL et al; "Factors Influencing Endothelial Cell Proliferation In Vitro"; <i>J. CELL PHYSIOL.</i> , (1978); Vol. 96; pages 203-213.	
re.re.	BU	WESSEL et al; "Method for the Quantitative Recovery of Protein In Dilute Solution In the Presence of Detergents and Lipids"; <i>ANALYTICAL BIOCHEMISTRY</i> , (1984); Vol. 138; pages 141-143.	
re.re.	BV	XIA et al; "Tumor Necrosis Factor $\alpha$ Induces Adhesion Molecule Expression Through The Sphingosine Kinase Pathway"; <i>PROC. NATL. ACAD. SCI. USA</i> (November, 1998); Vol. 95; pages 14196-14201; The National Academy of Sciences.	

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Sheet	4	of	4	Attorney Docket Number	PITSON =1A

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